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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARRIS, STEPHANIE N

ART UNIT	PAPER NUMBER
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3636

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,877

Applicant(s)

TEPPO ET AL.

Examiner

Stephanie N. Harris

Art Unit

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 12-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, it is unclear what the term "one dimension" in line 1 is referring to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 2, and 3, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (USPN 5314235).

Art Unit: 3636

Regarding claim 1, Johnson discloses a back construction for a seating unit comprising a flexible back panel (10) configured to support a seated user's torso and a bladder (24) attached to the flexible back panel so that when the bladder expands in one direction and simultaneously shortens in a different direction (Col.3, lines 13-24). The back panel is flexed to a different shape (Col. 3, lines 13-17).

Regarding claim 2, the bladder (24) is elongated as seen in Figure 1. It is inherent that, when the bladder expands in one direction and simultaneously shortens in a different direction, that the different direction will extend parallel to a length of the elongated bladder (Col.3, lines 13-24).

Regarding claim 3, the dimension of the bladder is parallel to the thickness direction of the bladder when it expands, since the bladder is one uniform shape.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 6, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Ishida et al. (USPN 4807931).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that includes multiple pleats and whose length extends in a vertical direction.

Regarding claim 4, Ishida et al. discloses a bladder (28) whose length extends in a vertical direction as seen in Figure 2. Regarding claim 5, the bladder includes multiple pleats (40,41) that extend in a direction perpendicular to the different direction that occurs when the bladder expands in one direction and simultaneously shortens in a different direction (Col. 2, lines 48-62). Regarding claim 6, the pleats (40,41) extend horizontally as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the a bladder that includes multiple pleats and whose length extends in a vertical direction, as shown by Ishida et al., in order to allow for even expansion of the bladder.

Johnson shows all of the teachings of the claimed invention but also fails to show the use of an air pump that is operably connected to a bladder. Regarding claim 19, Ishida et al. discloses the use of an air pump (34) that is operably connected to a bladder (28) (Col 2, lines 46-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the air pump, as shown by Ishida et al., in order to provide an air controlled bladder that is manually accessible to chair occupant.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Gillaspie (USPN 5074286).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a fluid pump that is operably connected to a bladder. Gillaspie discloses the use of a fluid pump that is operably connected to a bladder (Col. 2, lines 35-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson with the fluid pump, as shown by Gillaspie, in order to provide manual inflation or deflation of the bladder by the occupant of the chair.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Rhodes, Jr. (USPN 6203105).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that extends vertically from top to bottom of the back shell, but extends only partially horizontally across the back shell.

Regarding claim 11, Rhodes, Jr. discloses a bladder (3,4) that extends vertically from top to bottom of a back shell (2), but extends horizontally across the back shell as seen in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson, by replacing it with the bladder that extends vertically from top to bottom of the back shell, but extends only partially horizontally across the back shell, as shown by Rhodes, Jr. in order to provide uniform inflation and deflation of the air bladder.

Claims 1, 8, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. (USPN 6079785) in view of Johnson.

Regarding claim 1, Peterson et al. discloses a back construction for a seating unit comprising a flexible back panel (21) that is configured to support a seated user's torso. The back panel (21) can be flexed to a different shape (Col. 3, lines 59-62).

Regarding claim 8, the back panel includes a lumbar section (23) that is flexible (Abstract).

Regarding claim 9, the back panel includes a stiff top section (46) and a stiff bottom section (47) connected together by a lumbar section (23) as seen in Figure 5.

Regarding claim 10, the lumbar section includes vertically extending side strips (28) that flex and include horizontally extending strips (49) that extend between the side strips (Col. 3, lines 17-23).

Peterson et al. shows all of the teachings of the claimed invention but fails to show the use of a bladder that is attached to a flexible back panel so that when the bladder expands in one direction it simultaneously shortens in a different direction and the back panels is flexed to a different shape. Johnson discloses a the use of a bladder that is attached to a flexible back panel so that when the bladder expands in one direction and simultaneously shortens in a different direction. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back panel of Peterson et al. by adding a bladder, as shown by Johnson, in order to allow the flexing of the back panel to be varied.

Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Ishida et al. (USPN 4807931).

Regarding claim 20, Peterson et al. discloses a back construction for a seating unit is comprised of a rigid back frame (39), a flexible back panel (21). The flexible back panel is attached to and supported by the back frame at spaced apart points (Col. 3, lines 45-49). Regarding claim 21, the back panel (21) is slidably attached to the back frame at a bottom location (Col. 3, lines 45-52). Regarding claim 24, the back panel (21) includes a front surface where an energy mechanism can be laid on and against the front surface located by elements 29 and 65 as seen in Figure 3.

Peterson et al. shows all of the teachings of the claimed invention but fails to show the use of a constrictable energy mechanism that can be coupled to a back panel.

Ishida et al. discloses a the use of a constrictable energy mechanism (28) that can be coupled to a flexible back panel (30). Regarding claims 20 and 22, Ishida et al. discloses a bladder, that is a constrictable energy mechanism, which can be operably coupled to a flexible back panel at spaced apart locations so that when the energy mechanism is energized and constricts the back panel can be flexed to a different shape. Regarding claim 23, the bladder (28) includes transverse pleats (40,41) subdividing a length of the bladder into a plurality of sub-compartments as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back panel of Peterson et al. by adding a bladder, as shown by Ishida et al., in order to allow the flexing of the back panel to be varied.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Johnson and Heidmann et al. (USPN 6382719).

Peterson et al. in view of Johnson shows all of the teachings of the claimed invention but fails to show the use of a cover assembly that is attached to the back shell.

Regarding claim 15, Heidmann et al. discloses a cover assembly (66) that is attached to the back shell and can incorporate the bladder as seen in Figure 1. The cover assembly (66) has angled side edges extending non-parallel to side edges of the back shell as seen in Figure 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back shell of Peterson et al. in view of Johnson with the cover assembly, as shown by Heidmann et al., in order to provide an aesthetic cover for the back shell.

Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Schrewe et al. (USPN 5758925).

Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder that is riveted to the back shell. Regarding claim 16, Schrewe et al. discloses a bladder (106) that is riveted to a back shell (103) as seen in Figure 15. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the back shell of Schrewe et al. by adding a bladder that is riveted, as shown by

Art Unit: 3636

Schrewe et al., in order to provide a more secure means for the attachment between the bladder and the back shell.

Claims 25 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Knoblock et al. (USPN 6394546) in view of Ishida et al. (4807931).

Regarding claim 25, Knoblock et al. discloses a shape changeable component for a furniture unit comprising a flexible plastic panel having a curvilinear surface (Col. 15, lines 62-65). The plastic panel can be flexed to a different shape via the lumbar section (Abstract). Regarding claim 26, the plastic panel can be used as seating unit usable for a back of an automobile seat.

Knoblock et al. shows all of the teachings of the claimed invention but fails to show the use of a an inflatable member that can be operably attached to a plastic panel

Ishida et al. discloses an inflatable member (28) that can be operably attached to a plastic panel and laid on the curvilinear surface so that when the inflatable member expands in one direction and simultaneously shortens in a different direction. Ishida et al discloses the inflatable member (28) that is attached to a backrest (30) (Col. 2, lines 40-42). Regarding claim 26, a back panel is shown that is used in connection with an automobile seat as seen in Figure 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the plastic back panel of Knoblock et al. with the inflatable member, as shown by Ishida et al., in order to allow the flexing of the back panel to be varied.

Art Unit: 3636

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Green (USPN 5599219).

Johnson has been described above. Johnson shows all of the teachings of the claimed invention but fails to show the use of a bladder with a nylon structural layer and an elastic urethane layer.

Regarding claims 17 and 18, Green discloses a bladder (55) that includes multiple layers (Col. 3, lines 4-10). It is inherent that a nylon structural layer (60,61) will be flexible but non-stretchable and providing strength (Col. 1, lines 24-29). An elastic urethane layer (58, 59) is flexible and air impermeable to provide an air-receiving cavity (Col. 2, lines 39-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bladder of Johnson by replacing it with the bladder with a nylon structural layer and an elastic urethane layer, as shown by Green, in order to control the form of the inflated bladder.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to chairs with bladders: U.S. Pat. No. 5190348 to Colassanti, U.S. Pat. No. 6098000 to Long et al., U.S. Pat. No. 5860699 to Weeks, U.S. Pat. No. 5758925 to Schrewe et al., U.S. Pat. No. 5785669 to Proctor et al., U.S. Pat. No. 5816654 to Ellis, U.S. Pat. No. 5658050 to Lorbiecki, U.S. Pat. No. 6390553 to LeBlanc, U.S. Pat. No. 5868466 to Massara et al., and U.S. Pat. No. 6471294 to Dammermann et al.

Art Unit: 3636

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie N. Harris whose telephone number is 703-305-1838. The examiner can normally be reached on Monday-Friday from 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo, can be reached on (703) 308-0827. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

SNH
December 12, 2002



ANTHONY D. BARFIELD
PRIMARY EXAMINER